

Economic Impacts of Campers on the State of Maryland: Public and Private Campgrounds, 2004

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Introduction

The purpose of this study is to estimate the economic impacts of visitors to both state parks campgrounds and private campgrounds in Maryland in 2004¹. Campers in this study is defined as those who stayed overnight at either state park campgrounds or private campgrounds². Economic impacts are measured as the direct, secondary, and total impacts in terms of sales, tax revenue, personal income³, and employment in the state resulting from spending by public (state park) and private campground visitors. The economic impact estimates are produced using the Maryland Resource Allocation Model (RAM-MD) developed by the Department of Business and Economic Development.

Methods

The RAM-MD model estimates the economic impacts of campers in Maryland using data on visitor spending including park fees, accommodations, travel expenses, food and beverage and retail purchases. In order to obtain visitor spending data, a campground user survey was conducted by the Office of Tourism Development (OTD) from November 2003 to October 2004 to cover an entire year period. A campground user survey asked a series of questions regarding camper demographics, camping trip profiles, travel expenditures, prior camping experience, and camping user preferences.

A study sample was selected from two sources. For campers who stayed in state park campgrounds, sample was systematically selected from a monthly reservation list provided by SPHRIX who operates state park reservation system. For those who camped in private campgrounds, the bulk of surveys were sent to every private campground listed in the Maryland Association of Campgrounds. Since private campgrounds did not want to share their customers' mailing address with OTD and owners of each private campground distributed surveys to their customers.

A total of 8,848 surveys were disseminated by mail between December 2003 and November 2004 (2,587 surveys for state park campers and 6,261 surveys for private campgrounds users). A total of 1,059 completed surveys were returned with 12% response rate (32.4% response rate for state park campers and 3.5% response rate for private campgrounds users).

To estimate the economic impact of campground visitors, only spending that occurs in Maryland is included. The economic impact is measured in terms of additional output or sales, employee income (wages and salaries) and employment⁴ generated in Maryland resulting from annual expenditures of visitors. The direct impacts represent the initial first round expenditures by campground visitors. The direct expenditures associated with the camping activity also generate secondary economic benefits in Maryland. The secondary impacts, or the ripple effects, include indirect and induced effects. Indirect effects arise as local vendors increase their

¹ Exact study period covers November 2003 through October 2004.

² About 3% of respondents were day visitors and they were not included in the economic impact analysis.

³ Personal income covers wages and salaries including payroll benefits.

⁴ The impact on employment is represented in terms of annual full-time equivalent jobs.

spending on goods, services and employees, in order to meet the higher demand for their products brought about by the operation of the visitor facility. In this case, the indirect impact is generated by Maryland businesses supplying the input needs of the local vendors selling directly to campground visitors. The induced impact results from the increased demand created by the employees of the activity and the employees of its suppliers spending their incomes in Maryland. The indirect and induced impacts are estimated using a Maryland-specific input-output model developed from the nationally known IMPLAN system of the University of Minnesota IMPLAN Group. The total economic impact is the sum of direct and all secondary economic benefits.

Total numbers of campers were obtained from the Department of Natural Resources and the Maryland Association of Campgrounds. 36 out of 64 state parks and forests provide camping facilities including cabins. 800,720 visitors, which take 7% of total visitors⁵, camped in the state parks during the study period. For the same period, estimated total number of private campground visitors was 37,704 nights⁶.

Analysis

Description of Campers

Based on the camper survey, the majority of campers to Maryland campgrounds came from the state of Maryland (58.2%), followed by Pennsylvania (16.1%), Virginia (5.8%), and New Jersey (4.2%). International campers were not captured in this survey due to technical difficulties with regards to mailing survey as well as budget issues. Besides, the portion of international campers seems to be very small and wouldn't have significant consequences. Also, the camper survey suggests that the majority of campers to Maryland campgrounds seem to be married and well-educated with high income. More specifically, two-thirds (64%) of campers had annual household income of \$60,000 and more; about one out of four (24.2%) had annual household income of \$100,000 and more. Eighty-one percent (81%) of the respondents had some college and more educational attainment; twenty-one percent (21%) had post graduate degree. More detailed description and other results of the survey are available in the separate study report, "Maryland Campground Study".

Trip and Party Characteristics

The average camper party size was 5.1 persons. The day trip segment was not included in the analysis for the economic impact purpose. The party size for state park campers was 5.2, while private campground users had the party size of 4.9. The average party size seems to be larger than other types of visitors because family reunion (especially state park campers) was second primary purpose of trip with 6.4% for state park campers and 3% for private campground users. Overnight campers spent an average of 5.0 nights. There was significant difference between state park campers and private campground users in terms of duration; state park campers spent 3.1 nights, on the other hand, private campground users spent 12.8 nights. Private campground users tend to rent a camp site for longer period of time or even to own a camp site.

⁵ Total visitors to the state parks and forests in the period of November 03 through October 04 are 11,538,156.

⁶ The visitor nights are based on the total number of sites available for any given month multiplied by occupancy rate for that month. The visitor nights only reflect private campgrounds that are members of the Maryland Association of Campgrounds, which are 32 private campgrounds with total campsites of 5,704.

Average camping cost was \$377; average camping cost for private campground users was more than twice than that for state park campers.

Table 1. Party Size, Length of Stay, and Camping Cost

Overnight Campers	Total	State Park Campground	Private Campground
Average Party Size	5.1 persons	5.2 persons	4.9 persons
Average Length of Stay	5.0 nights	3.1 nights	12.8 nights
Average Camping Cost	\$377.46	\$301.28	\$697.68

Expenditure Category

Spending averages were estimated for each expenditure category by public and private campground segment from the Maryland Camper Survey. Spending averages presented in Table 2 were based on the entire party per trip.

Table 2. Average Expenditure by Category (average spending by entire party per trip)

Expenditure Category	Total (n=1059)		State Park Campground (n=784)		Private Campground (n=207)	
	n	Average	n	Average	n	Average
Campground Reservation/Site	540	\$258.87	409	\$180.45	105	\$542.09
Park use/entrance	89	\$25.18	59	\$23.90	24	\$29.21
Transportation	758	\$58.38	587	\$53.38	130	\$81.30
Grocery Stores	735	\$84.74	565	\$82.68	126	\$92.36
Restaurants/Fast Food	514	\$90.03	367	\$74.92	111	\$132.86
Gifts/Souvenirs	295	\$63.91	198	\$47.58	78	\$91.32
Other Shopping	235	\$99.82	155	\$76.43	60	\$157.68
Licensing	156	\$28.50	128	\$29.14	25	\$26.16
Other Recreational Activities	245	\$99.63	163	\$93.19	63	\$110.33
Motor Home Rental/Insurance	51	\$112.68	29	\$110.05	21	\$115.97
Extra Lodging	30	\$64.83	21	\$88.81	8	\$7.50
Special Cost	103	\$75.93	83	\$67.72	16	\$118.13
Total *	990	\$377.46	752	\$301.28	176	\$697.68

Note: Overnight campers only.

* Sum of average spending on each category does not match total due to differences in number of sample for each category.

State park campground visitors spent average total \$301 per party per trip, while private campground visitors spent average total \$698 per party per trip. Private campground visitors spent twice than state park campground visitors in terms of total trip spending. That's not only because camping fee in private campgrounds is more expensive but also because private campground visitors stay longer. Other than camping fee, there seem to differ in spending patterns between state park campers and private campground visitors. For state park campers, motor home rental/insurance was the second largest category, followed by other recreational activities and extra lodging. On the other hand, private campground visitors spent more money on shopping other than souvenir/gifts and other special cost not-specified in the spending category.

Economic Impacts of Maryland Campgrounds

Visitors to Maryland public (state park) and private campgrounds directly spent more than \$139 million in the state in 2004. Spending by Maryland campground visitors also had a secondary impact (indirect and induced effects)⁷ of more than \$92 million. Including direct and secondary impacts, the total impacts of public and private campground visitor spending in 2004 on the state economy is \$231.9 million in total sales. Specifically, spending by visitors to state park campgrounds totaled \$168.8 million, whereas private campgrounds visitors spent \$63 million in total sales.

Table 3. Maryland Campgrounds Economic Impact Summary

Impact Category	Direct Impact	Secondary Impact	Total Impact
Sales (\$)			
State Park Campgrounds	\$101,658,671	\$67,135,652	\$168,794,323
Private Campgrounds	\$37,549,817	\$25,522,782	\$63,072,600
Total	\$139,208,488	\$92,658,434	\$231,866,923
Jobs (Full-time equivalent jobs)			
State Park Campgrounds	1,627	628	2,255
Private Campgrounds	649	236	885
Total	2,276	864	3,140
Wages & Salaries (\$)			
State Park Campgrounds	\$38,409,680	\$21,035,515	\$59,445,195
Private Campgrounds	\$14,252,463	\$7,908,050	\$22,160,513
Total	\$52,662,143	\$28,943,565	\$81,605,708
State & Local Taxes (\$)			
State Park Campgrounds	\$8,366,892	\$1,388,720	\$9,755,612
Private Campgrounds	\$3,232,158	\$521,641	\$3,753,799
Total	\$11,599,050	\$1,910,361	\$13,509,411

The spending by campground visitors supported 3,140 jobs in Maryland in 2004. Of these, 2,276 were directly related to visitor spending at campgrounds and ancillary activities. Campground visitor spending also generated 864 indirect and induced jobs in the related businesses.

⁷ Secondary impact includes both indirect and induced impacts. Indirect impacts (supply effect) are generated by Maryland vendors supplying goods and services to the businesses that sell directly to the visitors. For example, linen suppliers benefit from visitor spending at lodging establishments. Induced effects (income effect) result from the spending of income earned through a direct or indirect effect of the visitor spending. For example, motel and linen supply employees live in the region and spend their income in Maryland.

Over \$81.6 million in total personal income (wages and salaries) was generated for total employment generated by campground visitor spending, with in excess of \$52 million in personal income directly related to tourism and recreation sectors.

Maryland campground visitor spending generated \$13.5 million in total tax revenue for the state and local government. Nearly \$8.4 million in direct state and local tax revenue was generated by state park campground visitors, while over \$3.2 million in direct state and local tax revenue was generated by private campground visitors.

Study Limitations

The campground visitor spending was based on the campground visitor survey done in both state parks and private campgrounds. Results are assumed to represent visitors to both types of campgrounds. Due to a low response rate for the private campgrounds, spending data may be skewed. Also, this is subject to sampling errors, measurement errors and potential biases.

The study did not include day visitors to the state parks or private campgrounds, which may have different party sizes and show different behavioral patterns. Thus, the study only represents the economic impact by overnight campground visitor spending.